



May 23, 2022

Mr. Shane LaFave
Roers Companies
110 Cheshire Lane, Suite 120
Minnetonka, MN 55305
Via Email Only to shane@roerscompanies.com

Subject: Technical Assistance Provided - Review of Commissioning Plan
Community Within the Corridor – West Block
3212 W. Center Street, 2727 N. 32nd Street, & 2758 N. 33rd Street, Milwaukee, WI
BRRTS #: 02-41-587376, FID #: 341333190

Dear Mr. LaFave:

On May 3, 2021, the Wisconsin Department of Natural Resources (DNR) received *Proposed Vapor Mitigation Commissioning Plan* with a Technical Assistance fee of \$700 for DNR review and response for the above-referenced site. On May 11, 2022, the DNR provided *Technical Assistance Provided – Review of Commissioning Plan* letter that provided feedback of the plan. On May 19, 2022, the DNR received commissioning plan revisions via email (collectively, the Report). The Report was prepared on your behalf by K. Singh & Associates, Inc. The DNR reviewed the Report for regulatory compliance with Wis. Admin. Code chs. NR 722 and NR 724, and generally approves the commissioning plan, as presented in the Report.

The results of the first round of commissioning should be evaluated to determine if additional sampling locations are necessary during future commissioning events. Following the submittal of the commissioning results, the DNR reserves the ability to request additional commissioning sample locations, per Wis. Admin. Code NR § 724.13(1)(d). Please refer to the May 11, 2022, DNR letter (attached) for additional considerations and next steps as the commissioning process moves forward, as applicable.

The DNR appreciates the actions you are taking to restore the environment at this site. If you have any questions concerning the site or this letter, please contact me at (414) 435-8021, or by email at jane.pfeiffer@wisconsin.gov.

Sincerely,



Jane K. Pfeiffer
Project Manager – Hydrogeologist
Remediation & Redevelopment Program

Attachment(s):

Technical Assistance Provided – Review of Commissioning Plan, dated May 11, 2022

cc: Mr. Que El-Amin, Scott Crawford, Inc. – que@scott-crawford.com
Mr. Robert Reineke, K. Singh & Associates, Inc. – reineke@ksinghengineering.com
Dr. Pratap N. Singh, K. Singh & Associates, Inc. – psingh@ksinghengineering.com
Mr. Daniel Pelczar, K. Singh & Associates, Inc. – dpelczar@ksinghengineering.com



May 11, 2022

Mr. Shane LaFave
Roers Companies
110 Cheshire Lane, Suite 120
Minnetonka, MN 55305
Via Email Only shane@roerscompanies.com

Subject: Technical Assistance Provided – Review of Commissioning Plan
Community Within the Corridor – West Block
3212 W. Center Street, 2727 N. 32nd Street, & 2758 N. 33rd Street, Milwaukee, WI
BRRTS #: 02-41-587376, FID #: 341333190

Dear Mr. LaFave:

On May 3, 2021, the Wisconsin Department of Natural Resources (DNR) received *Proposed Vapor Mitigation Commissioning Plan* (the Report) with a Technical Assistance fee of \$700 for DNR review and response for the above-referenced site. The Report was prepared on your behalf by K. Singh & Associates, Inc. (K. Singh) and presents details on the vapor mitigation system (VMS) commissioning plans for all applicable site buildings accompanied by a commissioning timeline with proposed occupancy schedules. The DNR reviewed the Report for regulatory compliance with Wis. Admin. Code chs. NR 722 and NR 724, and has determined that the commissioning plan, as presented in the Report, cannot be approved at this time.

Report Review:

The Report states that the performance goals for the proposed activities include demonstrating a sub-slab depressurization of at least 0.004 inches-H₂O under the entire ground floor slab where vapors exceeding their applicable vapor risk screening levels were determined to be present, demonstrating that there are no indoor air exceedances of vapor action levels (VALs), and demonstrating that the ground floor slab acts as a barrier. The DNR provides the following feedback and recommendations pertaining to the commissioning plan presented in the Report:

1. Only two rounds of sub-slab vapor sampling have occurred in the basements of Building 4, 6, and 8A. As the DNR previously indicated in the *Review of Site Investigation* letter, dated November 22, 2022, a third round of sub-slab vapor sampling is necessary within these basements to demonstrate whether sub-slab mitigation is necessary. This sampling should take place prior to the VMS initial operation.
2. Pressure field extension (PFE) measurements are proposed to be collected from sixteen sub-slab vapor pins (SVP-1 – SV-16) within Buildings 7, 8A and 8B, as displayed on Figure 2 of the Report. Based on the size of the buildings compared to the number of vapors pins proposed, additional pins are necessary to adequately measure and demonstrate PFE throughout the entire building footprint.
 - a. One example of an area where additional vapor pin(s) would be beneficial is to the west of SVP-10.
 - b. Update Figure 2 with the additional vapor pin locations.
 - c. All vapor pins must be placed, at a minimum, 4 feet away from exterior walls.
 - d. Provide updated figure(s) showing the updated vapor pin locations.

3. PFE measurements are proposed to be collected from fifteen sub-slab vapor pins (SVP-17 – SVP-31) within Building 4 and 5, as displayed on Figure 3 of the Report. Based on the size of the buildings compared to the number of vapor pins proposed, additional pins are necessary to adequately measure and demonstrate PFE throughout the entire building footprint.
 - a. One example of an area where additional vapor pin(s) would be beneficial is to the southwest of SVP-25.
 - b. Update Figure 3 with the additional vapor pin locations.
 - c. All vapor pins must be placed at a minimum of 4 feet away from exterior walls.
 - d. Provide updated figure(s) showing the updated vapor pin locations.
4. K. Singh indicates that, if not all the vapor pins achieve the vacuum goal of 0.004 inches-H₂O, then the DNR's approval may be requested for the use of supplemental air exchange or treatment. Air exchange alterations or treatment will not be appropriate alternatives to demonstrating adequate PFE for the VMS.
5. K. Singh indicates indoor air samples will be collected following the collection of PFE measurements. The DNR recommends that the collection of indoor air samples occur immediately following PFE testing.
6. The DNR recommends that the passive indoor air sampling duration be expanded to be 1 – 2 weeks in length instead of the proposed 24 hours. Indoor air concentrations vary temporally, therefore, the purpose of the longer sample duration is to collect samples that are more representative of indoor air concentrations over time. Ensure that the sampling devices that are utilized will achieve detection limits below the VALs for the contaminants of concern.
7. The presented indoor air sample density is insufficient to adequately represent indoor air conditions in the site building. Furthermore, out of the approximately 197 residential units proposed for this redevelopment project, it does not appear that any indoor air sample locations were proposed within the residential spaces, where building occupants will likely spend most of their time. Additional indoor air sample locations must be added to each building floor level in areas where vapor intrusion potential is highest (i.e., near drains, stairwells, elevators, bathrooms, etc.) and within residential spaces. There must be sufficient indoor air data to demonstrate that the residential spaces are safe for human occupancy.
 - a. Provide updated figures showing the updated indoor air sampling locations.
8. The commissioning plan and occupancy schedule presented in the Report propose to initiate building occupancy after the first round of commissioning is completed. The second and third rounds of commissioning are proposed to occur following occupancy.
 - a. The DNR recommends that all three rounds of commissioning occur prior to occupancy to demonstrate that the building conditions are safe for the human occupants.
 - b. The DNR recommends that, prior to occupancy, at minimum, the first round of commissioning sampling report be submitted to provide the DNR the opportunity to provide feedback as may be needed.

Please understand that if there are any indoor air VAL exceedances identified in the first round, or any subsequent rounds, of commissioning, there could be acute human health risks present in the site buildings. The proposed schedule for occupancy should consider these health risks and potential modifications that may be needed to the VMS prior to occupancy to help to ensure that the buildings are safe for occupants.

Next Steps

In consideration of administrative code requirements, the DNR is requesting the implementation of the following schedule:

- Considering the feedback provided in this letter, present an updated VMS commissioning plan. The DNR will review this updated plan under the same technical assistance fee that was presented in the Report. Per Wis. Admin. Code ch. NR 712, include an engineer's signature with the updated plan.
- Per Wis. Admin. Code § NR 716.14, submit all sampling results within 10 days (on appropriately formatted tables) of receiving laboratory data. Given the strict timeline displayed in the Report, the DNR recommends presenting these as soon as is feasible.
- Per Wis. Admin. Code § NR 724.13, submit an operation and maintenance plan following the implementation of the VMS.
- Per Wis. Admin. Code § NR 724.15, submit a construction documentation or as-built report within 60 days after the date that all three rounds of VMS commissioning are completed. This report should include comprehensive documentation of the commissioning of the system.

The DNR appreciates the actions you are taking to restore the environment at this site. The DNR looks forward to continuing to work with you to create safe human health conditions at this site that support the Community Within the Corridor redevelopment project. If you have any questions concerning the site or this letter, please contact me at (414) 435-8021, or by email at jane.pfeiffer@wisconsin.gov.

Sincerely,



Jane K. Pfeiffer
Project Manager – Hydrogeologist
Remediation & Redevelopment Program

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Mr. Robert Reineke, K. Singh & Associates, Inc. – rreineke@ksinghengineering.com
Dr. Pratap N. Singh, K Singh & Associates, Inc. – psingh@ksinghengineering.com
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